

Abstract

It relates to an energy meter device with two inputs (1,2), where to signals are fed in,
which depend on electrical voltage (V) and an electrical current (I). These are digitized in
5 analog/digital transformers (3,4) and linked to one another. A phase evaluation block (9) is
coupled with outputs of the analog/digital transformers for the correction of phase
deviations, which can be caused by means of coupling the signals (14,16). Phase
10 evaluation block (9) controls a phase correction block (6) at the output of an analog/digital
transformer (4). The phase evaluation can take place in digital signal processing. As a
result, a cost-favorable compensation of phase errors is possible with limited expenditure,
so that a galvanic isolation is possible at the input when avoiding measurement errors. The
15 described energy meter device is particularly suitable for the implementation in integrated
circuitry.

Figure